

AMENDMENTS TO THE CLAIMS

1. (currently amended) A solid catalyst component for the polymerization of olefins comprising Mg, Ti, a halogen and an electron donor compound (ED) ~~belonging to~~selected from ethers, esters, amines, ketones, or nitriles, ~~characterized in that the~~wherein a molar ratio Mg/Ti is higher than 5, and ~~the~~a molar ratio ED/Ti is higher than 3.5.
2. (original) The solid catalyst component according to claim 1, in which the ED compound is selected from the group consisting of ethers, esters and ketones.
3. (original) The solid catalyst component according to claim 2, in which the ED compound is selected from the C2-C20 aliphatic ethers.
4. (original) The solid catalyst component according to claim 3, in which the ethers are cyclic ethers.
5. (original) The solid catalyst component according to claim 4, in which the cyclic ethers have 3-5 carbon atoms.
6. (original) The solid catalyst component according to claim 5, in which the cyclic ether is tetrahydrofuran.
7. (currently amended) The solid catalyst component according to claim 2, in which the ED compound is selected from ~~the~~ alkyl esters of C1-C20 aliphatic carboxylic acids.
8. (currently amended) The solid catalyst component according to claim 7, in which the ~~ester~~ is alkyl esters are selected from C1-C4 alkyl esters of aliphatic mono carboxylic acids.
9. (currently amended) The solid catalyst component according to claim 8, in which the alkyl ester is ethylacetate.
10. (original) The solid catalyst component according to claim 1, in which the ED/Ti molar ratio ranges from 3.7 to 40.
11. (currently amended) The solid catalyst component according to claim ~~1~~10, in which the ED/Ti molar ratio ranges from 4.5 to 30.
12. (original) The solid catalyst component according to claim 1, in which the Mg/Ti molar ratio ranges from 7 to 120.
13. (original) The solid catalyst component according to claim 1, in which the Mg atoms derive from MgCl₂.
14. (original) The solid catalyst component according to claim 1, in which the titanium atoms

derive from titanium tetrahalides or the compounds of formula $\text{TiX}_n(\text{OR}^1)_{4-n}$, where $0 \leq n \leq 3$, X is halogen and R is $\text{C}_1\text{-C}_{10}$ hydrocarbon group.

15. (currently amended) A catalyst for the polymerization of olefins comprising ~~the~~ a product obtained by contacting:
- (a) a solid catalyst component ~~according to anyone of the preceding claims~~ comprising Mg, Ti, a halogen and an electron donor compound (ED) selected from ethers, esters, amines, ketones, or nitriles, wherein a molar ratio Mg/Ti is higher than 5, and a molar ratio ED/Ti is higher than 3.5;
 - (b) ~~one or more~~ at least one aluminum alkyl ~~compounds~~ compound and, optionally,
 - (c) an external electron donor compound.
16. (original) The catalyst according to claim 15, in which the aluminum alkyl compound is an Al trialkyl.
17. (original) The catalyst according to claim 15, in which the aluminum alkyl compound is an aluminum alkyl halide.
18. (currently amended) The catalyst according to claim 15, in which the aluminum alkyl compound is ~~the~~ a product obtained by mixing an Al trialkyl compound with an aluminum alkyl halide.
19. (original) The catalyst according to claim 15, in which the external electron donor compound is a $\text{C}_2\text{-C}_{20}$ aliphatic ether.
20. (currently amended) The catalyst according to claim 19, in which the aliphatic ether is tetrahydrofuran.
21. (currently amended) The catalyst according to claim 15, in which the external electron donor compound is a silicon compound of formula $\text{R}_a^5\text{R}_b^6\text{Si}(\text{OR}^7)_c$, where a is 0, b is 1, c is 3, R^6 is a branched alkyl or cycloalkyl group, optionally containing heteroatoms, and R^7 is methyl.
22. (original) The catalyst according to claim 15, which is obtained by pre-contacting the components (a), (b) and optionally (c) for a period of time ranging from 0.1 to 120 minutes at a temperature ranging from 0 to 90°C .
23. (original) The catalyst according to claim 22, in which the pre-contact is carried out in the presence of small amounts of olefins, for a period of time ranging from 1 to 60 minutes, in a liquid diluent, at a temperature ranging from 20 to 70°C .
24. (currently amended) The catalyst according to claim 15, which is pre-polymerized with ~~one or~~

- ~~more olefins~~ at least one olefin of formula $\text{CH}_2=\text{CHR}$, where R is H or a C1-C10 hydrocarbon group, up to forming amounts of polymer from about 0.1 up to about 1000 g per gram of solid catalyst component (a).
25. (currently amended) A process ~~for the (co)polymerization of~~ comprising (co)polymerizing olefins $\text{CH}_2=\text{CHR}$, wherein R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms, carried out in the presence of a catalyst ~~according to one or more of claims 15-24~~ comprising a product obtained by contacting:
- (a) a solid catalyst component comprising Mg, Ti, a halogen and an electron donor compound (ED) selected from ethers, esters, amines, ketones, or nitriles, wherein a molar ratio Mg/Ti is higher than 5, and a molar ratio ED/Ti is higher than 3.5;
 - (b) at least one aluminum alkyl compound and, optionally,
 - (c) an external electron donor compound.
26. (original) The process according to claim 25, for the preparation of an ethylene/alpha olefin copolymer having a content of alpha olefin ranging from 0.1 to 20% by mol.
27. (currently amended) The process according to claim 26, ~~characterized in that it is carried out in gas-phase.~~
28. (currently amended) The process according to claim 27, ~~characterized in that it is carried out according to~~ further comprising the following steps:
- (i) contacting the catalyst components (a), (b) and optionally (c) for a period of time ranging from 0.1 to 120 minutes, at a temperature ranging from 0 to 90°C; optionally
 - (ii) pre-polymerizing with ~~one or more olefins~~ at least one olefin of formula $\text{CH}_2=\text{CHR}$, where R is H or a C1-C10 hydrocarbon group, up to forming amounts of polymer from about 0.1 up to about 1000 g per gram of solid catalyst component (a); and
 - (iii) polymerizing in the gas-phase ethylene, or mixtures thereof with α -olefins $\text{CH}_2=\text{CHR}$ in which R is a hydrocarbon radical having 1-10 carbon atoms, in ~~one or more~~ at least one fluidized or mechanically stirred bed ~~reactors~~ reactor, in the presence of ~~the~~ a product ~~coming from~~ formed in steps (i) or (ii).